

LED ARRAY FOR ILLUMINATING CELL WELL PLATES
AND AUTOMATED RACK SYSTEM FOR HANDLING THE SAME

ABSTRACT OF THE DISCLOSURE

An assembly for promoting the growth of plant tissues that includes a plurality of plates each defining an array of wells wherein each of the wells contains a tissue sample. Support for the plates is provided by a rack having a plurality of vertically stacked
5 shelves that may include one or more register depressions that urge the plates into predetermined positions. Light for the tissue samples is provided by a plurality of light-emitting diode arrays each mounted on a circuit board. Each circuit board is supported by a respective card edge connector of the rack so that the light-emitting diodes are in proximity to the plates supported on one of the shelves therebelow. Preferably, the light-
10 emitting diode array corresponds to the well array supported in the registered position on the shelf therebelow so that each light-emitting diode is centered above a respective one of the wells.